ABSTRACT OF THE DISCLOSURE

RF digital information signals are interfaced with a medium voltage power line data channel. An interface circuit connects between the medium voltage and low voltage sides of a step-down power transformer. The interface circuit includes a metal oxide arrestor (MOV) and an opto-coupler. The MOV provides the needed capacitance and voltage rating without the bulk of a capacitor having similar capacitance and voltage rating. The opto-coupler provides an added margin of safety for coupling communications data while isolating the medium voltage power from the low voltage side of the transformer.